

REMARKS

In the interview, the Examiner stated that phrasing in claim 1, “windshield provides a protected zone against high velocity air infusion for both the pilot flame and for the thermocouple and against high air flow is a partially perforated tubular chamber that is intersectingly engaged with the mounting bracket” was not explicit enough to differentiate from Sneed’s (U.S. Patent No. 4,128,393) windshield, as Sneed also teaches a shield with a protected zone. The Examiner argued that claim 1 could be interpreted to include a shield as taught by Sneed.

Applicant argued that the language and drawings as taught in the specification define the Applicant’s windshield. As taught, Applicant’s windshield is sufficient in size to surround the pilot light, the thermocouple and the burner, and does not merely provide protection on one side like Sneed’s shield, but all sides. In addition, Applicant’s windshield does not have a canopy, as taught by Sneed. On page 7, line 18, the specification describes the windshield as an “open ended chamber.” Figure 3 clearly shows a substantially tubular chamber having open ends.

Examiner consented that if claim 1 was amended so that one could not construe that Applicant’s claimed windshield was not broad enough to encompass Sneed’s shield (5), then claim 1 would be allowed. It was agreed that if claim 1 were amended to claim a windshield having open ends, then this would be sufficient to differentiate Applicant’s invention from Sneed’s. The Applicant has amended claim 1, claiming a windshield that is substantially an open ended tubular chamber, wherein the windshield is sufficient in size to substantially encompass the pilot light assembly. The Amendment should place claim 1 in condition for allowance.

Claim 20 is also amended. Claim 20 has always claimed a windshield that is a substantially tubular chamber having open ends and, therefore, distinguishes over Sneed; however, there was improper antecedent basis for the “apparatus.” This has been corrected.

Claims 2 and 29 have been amended to correct typographical errors.

Rejections before the Interview

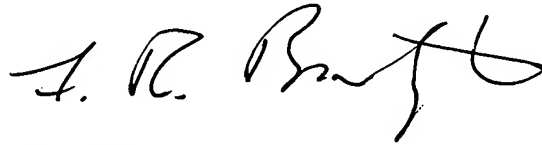
Claims 1-31 stand rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,919,084 to Maurice ("Maurice '084") in view of U.S. Patent No. 4,128,393 to Sneed ("Sneed"). Sneed teaches a gas burner (3) and thermocouple (2) protected from air-flow by a perforated shield (5) having a shell-like shape. The shield forms an air protected zone within its confines. The Examiner asserts it would be obvious to modify the burner assembly of Maurice '084 to incorporate the windshield of Sneed.

Examiner admits that Maurice '084 does not teach a windshield, and the Examiner admits that Sneed teaches a perforated shield (5) having a shell-like shape. Applicant's windshield has open ends and is a partially perforated tubular chamber that provides protection from the wind from all sides. Sneed's shell-like perforated shield will only provide a protected zone on the leeward side of the shield (5) to the flame (7). The thermocouple (2) is not protected against crosswinds (see Fig. 1). Sneed teaches in col. 3, lines 3-5, that "shield 5 is adopted to enclose the space about the flame 7 at the 'back' (i.e., the side of nozzle 3 facing the source of wind gusts or drafts), to the side, and above the flame in a canopy fashion." Applicant's windshield does not have a canopy. A canopy would prevent Applicant's burner flame from impinging the ceramic element (44) of burner 100, as shown in Fig. 1. The Sneed windshield would not work with "Maurice '084" for a similar reason. Note that Sneed does not mention protecting the thermocouple, and has to orient the shield so that it faces the wind. Applicant's windshield provides a surrounding chamber with open ends that protects the thermocouple (22) and pilot light flame (56) from crosswinds, and/or winds from any side of the windshield. The thermocouple (22) and pilot light flame (56) are enclosed within the chamber. No orientation or alignment is required.

It is unclear how a Sneed shell-like shape windshield with a canopy could be combined with Maurice '084's ignition assembly (48, 20, 24, and 26), and Maurice '084's ceramic radiant element 110, as the shell-shaped shield would be on its side and would provide no wind protection. Alternatively, the shell-shaped shield would be orthogonal to the ignition system and, likewise, would provide no wind protection and the flame would not impinge the ceramic radiant element 110. Applicant's invented tubular shield, vertically mounted, would appear to block Maurice '084's deflector 48, and positioning, as shown, would necessitate that it slide over the gas line (14) and electrical leads (56). Applicant's invention is not obvious in light of Maurice '084 in view of Sneed. The rejections are respectfully overcome, and should be withdrawn.

In view of the foregoing Amendment and these remarks, we believe this Application to be in condition for allowance and respectfully request such favorable action on behalf of the Applicant.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "F. R. Brockington", with a stylized flourish at the end.

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